

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MK

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/700,452 11/15/00 HEIDEMANN

T 49069

EXAMINER

HM12/0601

KEIL & WEINKAUF
1101 CONNECTICUT AVENUE NW
WASHINGTON DC 20036

SHAMEEM, G

ART UNIT

PAPER NUMBER

1626

3

DATE MAILED:

06/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/700,452

Applicant(s)

HEIDEMANN ET AL.

Examiner

Golam M. M. Shameem

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Status of Claims

Claims 1-7 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections, set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (U.S. Pat. No. 5,229,527) or Blechschmitt et al. (U.S. Pat. No. 4,077,984).

Applicant claims a process for preparing phthalic anhydride by catalytic gas-phase oxidation.

Determination of the scope and content of the prior art (MPEP §2141.01)

Ueda et al. teaches the production of phthalic anhydride by the catalytic vapor-phase oxidation of a mixture of ortho-xylene and naphthalene and a molecular oxygen containing gas at a temperature in the range between 300 ° and 450 ° C using a catalyst containing V₂O₅, Sb₂O₃, P and TiO₂(page 3, paragraph 1). Blechschmitt et al. teaches the similar process for the manufacture of phthalic anhydride by oxidizing o-xylene and /or naphthalene over a supported catalyst containing vanadium pentaoxide, Sb₂O₃, P and titanium dioxide, at from 350 ° to 500 ° C (see, for example column 2, lines 1-13).

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Ueda et al. discloses a method of producing phthalic anhydride by the catalytic vapor-phase oxidation, which is similar to applicant's process for the production of identical product. The difference between the methods taught in the reference and the claimed process herein lies in the variation of reaction conditions (such as ratio of reaction components, active catalyst composition, etc.), which is obvious in and of itself absent a showing of unexpected results. The showing in the instant specification on page 12 and 14 is insufficient to overcome the rejection of the claims over the U.S. Patents No. 5,229,527 and 4,077,984 because it does not teach any significant change or improvement over the prior arts to produce phthalic anhydride.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

It would have been prima facie obvious to one having ordinary skill in the art at the time of the invention was made since Ueda et al. teach methods which are similar to the claimed process and producing identical product. The motivation to make the claimed process derives from the expectation that using similar reagents and reaction conditions with minor adjustments to obtain similar products, that are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979). It is well established that the optimization of variables, such as molar ratios, and especially the ratio of the components of the catalysts in a known process is a prima facie obvious (In re Boesch, 205 USPQ 215,1980). In looking at the instant claimed process as a whole, it would have been suggested to one skilled in the art unless unobvious or unexpected results can be shown.

Claim Objections

The Abstract is objected to as being too long. A new Abstract which is 25 lines or less in length is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Golam Shameem, Ph.D. whose telephone number is (703) 305-0116. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mckane, can be reached at (703) 308-4532. The Unofficial fax phone number for this Group is (703) 308-7921. The Official fax phone numbers for this Group are (703) 308-4556 or 305-3592. When filing a FAX in Technology Center 1600, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

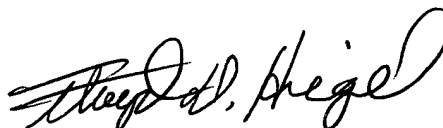
Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy

Art Unit: 1626

published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-2286.

Golam M M Shameem, Ph.D.
Patent Examiner
Art Unit 1626, Group 1620
Technology Center 1



Floyd Higel
Primary Patent Examiner
Art Unit 1626, Group 1620
Technology Center 1

May 25, 2001